

## Abstract

Disclosed is a method and an apparatus for controlling transmission electric power capable of minimizing a decrease in the amount of maximum transmission electric power without degrading an adjacent channel leakage power ratio when code-multiplexing additional control information with data and main control information. A mobile device checks values of gain factors  $\beta_d$  and  $\beta_c$  when performing code multiplexing to transmit signals from channels DPDCH to transmit data, DPCCH to transmit main control information, and HS-DPCCH to transmit additional control information. A maximum transmission electric power is decreased at a plurality of levels based on the check result and a ratio ( $\Delta_{hs}$ ) between the gain factors  $\beta_c$  and  $\beta_{hs}$ . It may be preferable to check the presence or absence of transmission data instead of the gain factor  $\beta_d$ . In this case, when no transmission data is available, the maximum transmission electric power is decreased at a plurality of levels based on  $\Delta_{hs}$ . When transmission data is available, the maximum transmission electric power is decreased at a plurality of levels based on the gain factor  $\beta_c$  and  $\Delta_{hs}$ .